Claims

1. Device for transport and cleaning of air by using electric ion wind, said device comprising an elongated corona electrode (K), a target electrode (M) arranged at a distance from the corona electrode (K) and a direct current source that has one terminal connected to the corona electrode (K) and the other terminal to the target electrode (M), the design and voltage of the corona electrode (K) between the mentioned terminals of the direct current source being such that a discharge occurs at the corona electrode (K), said discharge generating air ions, that the target electrode (M) on one hand has an extension in the longitudinal direction of the corona electrode (K) and on the other hand an extension transverse to the longitudinal direction of the corona electrode (K), that the target electrode (M) has a certain permeability to the air flow that is generated between the electrodes (K, M), and that the device has outlet openings (O1, O2) for the air flow, c h a r a c t e r i s e d in that an imaginary plane (I) that extends from a centre portion of the target electrode (M) and holds the corona electrode (K) has an extension transverse to the target electrode (M) or portions of the target electrode (M), and that the target electrode (M) comprises an active gas absorbent (Ak).

2. Device according to claim 1, c h a r a c t e r i s e d in that the imaginary plane (I) forms an angle (α) with the target electrode (M) or portions of the target electrode (M), and that $45° \leq \alpha \leq 135°$.

3. Device according to claim 1 or 2, c h a r a c t e r i s e d in that the gas absorbent (Ak) of the target electrode (M) is encased between air permeable surfaces (M1, M2) of conductive, semi-conductive or dissipative material.

4. Device according to claim 1 or 2, c h a r a c t e r i s e d in that the target electrode (M) itself constitutes a conductive, semi-conductive or dissipative material.

5. Device according to any of the previous claims, c h a r a c t e r i s e d in that the chemical absorbent (Ak) constitutes activated carbon.

6. Device according to any of the claims 1-5, c h a r a c t e r i s e d in that air flow ducts (S1, S2) are provided on both sides of the target electrode (M).

7. Device according to claim 6, c h a r a c t e r i s e d in that the walls of the air flow ducts (S1, S2) are manufactured from or coated by material that may be energized to a voltage that is different than the voltage of the target electrode (M), and that the walls or the material are earthed.

8. Device according to claim 6 or 7, c h a r a c t e r i s e d in that electrode elements (v1, v2, h1, h2) are provided in the air flow ducts (S1, S2), said electrode elements (v1, v2, h1, h2) being part of a precipitator.

9. Device according to any of the previous claims, c h a r a c t e r i s e d in that the target electrode (M) has V-shape.

10. Device according to any of the previous claims, c h a r a c t e r i s e d in that the target electrode (M) is segmented in units that are electrically insulated from each other.

11. Device according to any of the previous claims, c h a r a c t e r i s e d in that the corona electrode (K) is segmented in units that are electrically insulated from each other.

12. Method for transport and cleaning of air by using electric ion wind, said ion wind being generated between a corona electrode (K) and a target electrode (M), c h a r a c t e r i s e d in that the ion wind partly passes through the target electrode (M) and partly flows along the target electrode (M) on the side that of the target electrode (M) that faces the corona electrode (K).